

**U. S. PLANT PATENT APPLICATION OF**

**LEO HOOGENDOORN**

**FOR: DIASCIA PLANT NAMED**

**‘KIEDITHREE’**

*HOOGENDOORN, Leo*

TITLE: DIASCIA PLANT NAMED 'KIEDITHREE'

APPLICANT: LEO HOOGENDOORN

BOTANICAL CLASSIFICATION/CULTIVAR DESIGNATION:

*Diascia X hybrida* cultivar Kiedithree

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## BACKGROUND OF THE INVENTION

The present Invention relates to a new and distinct cultivar of Diascia plant, botanically known as *Diascia X hybrida*, and hereinafter referred to by the cultivar name Kiedithree.

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The new Diascia is a product of a planned breeding program conducted by the Inventor in Ambacht, The Netherlands. The objective of the breeding program is to create new compact Diascias with numerous flowers and attractive flower coloration.

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The new Diascia originated from a cross-pollination made by the Inventor in 2000 of two unnamed proprietary *Diascia X hybrida* seedling selections, not patented. The new Diascia was selected as a single plant

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from the resulting progeny of the cross-pollination by the Inventor in 2000  
in an controlled environment in Ambacht, The Netherlands.

Asexual reproduction of the new cultivar by terminal cuttings in a  
controlled environment in Ambacht, The Netherlands since 2001 has  
5 shown that the unique features of this new Diascia are stable and  
reproduced true to type in successive generations.

#### SUMMARY OF THE INVENTION

Plants of the cultivar Kiedithree have not been observed under all  
possible environmental conditions. The phenotype may vary somewhat  
10 with variations in environment such as temperature and light intensity  
without, however, any variance in genotype.

The following traits have been repeatedly observed and are  
determined to be the unique characteristics of 'Kiedithree'. These  
characteristics in combination distinguish 'Kiedithree' as a new and  
15 distinct cultivar of Diascia:

1. Compact and outwardly spreading to trailing plant habit.
2. Freely branching habit.

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3. Freely flowering habit.
4. Light red-colored flowers with darker red-colored centers.
5. Long flowering season.

Plants of the new Diascia are more freely flowering than plants of  
5 the parent selections. In addition, plants of the new Diascia and the  
parent selections differ in flower color as plants of the parent selections  
have pink-colored flowers.

Plants of the new Diascia can be compared to plants of the cultivar  
Pink Queen, not patented. In side-by-side comparisons conducted in  
10 Ambacht, The Netherlands, plants of the new Diascia differed from plants  
of the cultivar Pink Queen in the following characteristics:

1. Plants of the new Diascia were more freely flowering than  
plants of the cultivar Pink Queen.
2. Plants of the new Diascia had larger flowers than plants of  
15 the cultivar Pink Queen.

3. Plants of the new Diascia and the cultivar Pink Queen differed in flower color as plants of the cultivar Pink Queen had pink-colored flowers.

#### BRIEF DESCRIPTION OF THE PHOTOGRAPHS

5 The accompanying colored photographs illustrate the overall appearance of the new cultivar, showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the photographs may differ slightly from the color values cited in the detailed botanical description which accurately describe the colors  
10 of the new Diascia.

The photograph at the bottom of the sheet comprises a side perspective view of a typical flowering plant of 'Kiedithree' grown in a container. The photograph at the top of the sheet comprises a close-up view of a typical inflorescence of 'Kiedithree'.

#### 15 DETAILED BOTANICAL DESCRIPTION

The aforementioned photographs and following observations and measurements describe plants grown in Lompoc, California, in a

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polycarbonate-covered greenhouse during the winter with day temperatures ranging from 21 to 24°C, night temperatures ranging from 15 to 18°C, and light levels ranging from 4,000 to 8,000 foot candles. Plants were grown for about seven weeks with one plant per 12.5-cm container.

Color references are made to the Royal Horticultural Society Colour Chart, 1995 Edition, except where general terms of ordinary dictionary significance are used.

#### BOTANICAL CLASSIFICATION:

*Diascia X hybrida* cultivar Kiedithree.

#### PARENTAGE:

Female parent: Unnamed proprietary *Diascia X hybrida* seedling selection, not patented.

Male parent: Unnamed proprietary *Diascia X hybrida* seedling selection, not patented.

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PROPAGATION:

Type cutting: Terminal vegetative cuttings.

Time to initiate roots, summer and winter: About one week at 21°C.

5 Time to produce a rooted young plant, summer and winter: About two weeks at 21°C.

Root description: Fine, fibrous; white in color.

Rooting habit: Freely branching.

PLANT DESCRIPTION:

10 Form: Compact and outwardly spreading to trailing plant habit.  
Freely branching with lateral branches potentially forming at every node. Moderately vigorous growth habit.

Plant height: About 20 cm.

Plant diameter: About 42 cm.

15 Lateral branches:

Appearance: Thin, wiry.

Length: About 30 cm.

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Diameter: About 2 mm.

Internode length: About 2 cm.

Texture: Smooth, glabrous.

Color: 144A.

5      Foliage description:

Arrangement: Opposite; simple.

Length: About 3 cm.

Width: About 2.2 cm.

Shape: Deltoid.

10      Apex: Broadly acute.

Base: Cordate.

Margin: Broadly serrate.

Texture, upper and lower surfaces: Smooth, glabrous.

Venation pattern: Pinnate; arcuate.

15      Color:

Developing foliage, upper surface: 144A.

Developing foliage, lower surface: 146B.



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Fully expanded foliage, upper surface: 147A.

Fully expanded foliage, lower surface: 147B.

Venation, upper and lower surfaces: 147B.

Petiole length: About 5 mm.

5                      Petiole diameter: About 2 mm.

Petiole color: 144A.

FLOWER DESCRIPTION:

10                      Flower type and habit: Solitary zygomorphic flowers arranged on  
terminal racemes. Five modified petals fused at base: two upper  
(banner) petals, two lateral petals, and one larger lower lip petal.

Flowers not persistent. Flowers face mostly outwardly.

Quantity: Freely flowering; typically about 18 to 20 buds and  
flowers per lateral branch.

15                      Natural flowering season: Long flowering period; plants typically  
flower during the spring and early summer in the Northern  
Hemisphere; flowering continuous during this period.

Flower longevity on the plant: About four to five days.

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Fragrance: Not detected.

Inflorescence size:

Length: About 15 cm.

Width: About 5.5 cm.

5 Flower size:

Length: About 2 cm

Width: About 2 cm.

Depth: About 1.1 cm.

Flower buds (showing color):

10 Length: About 5 mm.

Diameter: About 7 mm.

Shape: Roughly spherical.

Color: 51D.

Petals:

15 Quantity/arrangement: Five modified petals fused at base:  
two upper (banner) petals, two lateral petals, and one larger  
lower lip petal. Base of banner petals with concave yellow

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eyespots; lower surfaces of lateral petals modified into nectar spurs; and lower lip petal convex forming a roughly horizontal insect landing platform.

Length:

5                      Banner petals: About 8 mm.

                        Lateral petals: About 8 mm.

                        Lower lip petal: About 1 cm.

Width:

                        Banner petals: About 7 mm.

10                     Lateral petals: About 9 mm.

                        Lower lip petal: About 1.6 cm.

Lateral petal spur:

                        Length: About 6 mm.

                        Diameter, at petal attachment: About 2 mm.

15                     Shape, all petals: Roughly spatulate.

                        Apex, all petals: Rounded.

                        Margin, all petals: Entire.

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Texture, all petals, upper and lower surfaces: Smooth, satiny.

Color, all petals:

When opening, upper surface: 39A.

5 When opening, lower surface: 39C.

Fully opened, upper surface: 39A to 39B; towards base, 50A; color becoming closer to 54C with development.

Fully opened, lower surface: 50C to 50D.

10 Nectar spurs: 51B.

Eyespot on banner petals: 14A.

Sepals:

Arrangement/appearance: Single whorl of five sepals fused at base; star-shaped.

15 Length: About 5 mm.

Width: About 1 mm.

Shape: Elliptic.

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Apex: Acute.

Margin: Entire.

Texture, upper and lower surfaces: Smooth, glabrous.

Color, upper and lower surfaces: 146A.

5 Peduncles:

Length: About 7.75 cm.

Width: About 1.5 mm.

Angle: Upright to about 45° from vertical.

Strength: Moderately strong.

10 Texture: Smooth, glabrous.

Color: 144A.

Pedicels:

Length: About 2.8 cm.

Width: Less than 1 mm.

15 Angle: About 45° from the peduncle.

Strength: Moderately strong; slender.

Texture: Smooth, glabrous.

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Color: 144B.

Reproductive organs:

Stamens:

Quantity per flower: Four.

5 Anther shape: Ovoid.

Anther length: Less than 1 mm.

Anther color: 23A.

Pollen amount: Scarce.

Pollen color: 23A.

10 Pistils:

Quantity per flower: One.

Pistil length: About 4 mm.

Style length: About 2 mm.

Style color: 144D.

15 Stigma shape: Rounded.

Stigma color: 144B.

Ovary color: 145A.

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Fruit/seed: Fruit and seed production has not been observed.

DISEASE/PEST RESISTANCE:

Plants of the new Diascia have not been noted to be resistant to pathogens or pests common to Diascia.

5 TEMPERATURE TOLERANCE:

Plants of the new Diascia have been observed to tolerate temperatures from 0 to 38°C.